 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: ATL95FA057		Aircraft Registration Number: N227DM	
		Occurrence Date: 03/03/1995		Most Critical Injury: Fatal	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place GAINESVILLE	State GA	Zip Code 30501	Local Time 1943	Time Zone EST	
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility: 1		Direction From Airport: 150	
Aircraft Information Summary					
Aircraft Manufacturer CESSNA		Model/Series 208B		Type of Aircraft Airplane	
Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:					
<p>HISTORY OF FLIGHT</p> <p>On March 3, 1995, at 1943 eastern standard time, a Cessna 208B, N227DM, was destroyed following a collision with terrain, and a post crash fire, during an instrument approach to the Gainesville, Georgia Airport. Both the airline transport/instructor pilot and the private/instrument rated pilot were fatally injured in the accident. The aircraft was being operated under the provisions of 14 Code of Federal Regulations Part 91 by D.M.C. Flying Service, at the time of the accident. Instrument meteorological conditions existed at the time of the accident, and an instrument flight rules flight plan was in effect for the flight. The flight departed Savannah, Georgia, at 1730.</p> <p>All radio communications with the aircraft were reported to be normal. The flight had been cleared by the Atlanta Air Route Traffic Control Center for the Non-Directional Beacon (NDB) approach and cleared to change radio frequencies to the advisory channel. Witnesses reported observing the aircraft descend out of the base of the overcast clouds in a 10 degree nose down, 45 degree left wing down attitude. The aircraft impacted the trees and terrain about 3/4 mile south southeast of the airport. The trees and terrain at the impact area were approximately 1200 feet above mean sea level.</p> <p>A pilot, flying on an instrument flight plan, and practicing instrument approaches in the area at the time of the accident, reported the following. He stated that at the time of the accident, he was in a holding pattern waiting for N227DM to complete the approach into Gainesville (GVL). He heard the conversations between Atlanta Approach Control, and the pilot of N227DM, and reported that all conversations were normal. He stated that he had departed Peachtree-Dekalb Airport (PDK), and executed several practice approaches into PDK. He reported that the cloud base at PDK was about 300 feet above ground level (AGL), and that the clouds were solid up to 5,000 feet above mean sea level (MSL). He said that there was no ice accumulation noted during his flight. He stated that during the approaches into PDK, he could see lights straight down below the aircraft about 500 feet AGL, but that there was no forward visibility through the clouds. He did not execute the approach into GVL, because N227DM did not report the approach complete. He stated that he did not expect to see the Gainesville Airport had he executed the approach, as the cloud base at PDK was below the minimum descent altitude for GVL.(See Record of Conversation With Mr. Johnny Masters Attached to This Report.)</p> <p>PERSONNEL INFORMATION</p> <p>The left seat pilot held an airline transport pilot certificate with airplane multiengine land rating, and commercial privileges airplane single engine land, and rotorcraft-helicopter ratings. He held a certified flight instructor certificate with airplane single and multiengine, instrument airplane, and rotorcraft-helicopter ratings. He held a first class medical certificate issued July 28, 1994 with a restriction for the use of corrective lenses. His pilot log book showed that he had</p>					
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Narrative (Continued)

obtained 2,005 hours of flight time, of which 201 hours were in the Cessna 208B aircraft. He had accumulated 221 hours of actual instrument flight time, and 99 hours of simulated instrument flight time. He had completed Flight Safety International's Cessna 208 Pilot Initial Training Course on February 21, 1994.

The right seat pilot held a private pilot certificate with airplane single and multiengine land, and instrument airplane ratings. The airplane multiengine land rating was limited to center line thrust. He held a third class medical certificate issued March 3, 1994, with a restriction for the use of corrective lenses. His pilot log book was not made available. On the last application for a medical certificate, he listed his civilian flight experience as 800 hours of flight time. He attended Flight Safety International's Cessna 208 Aircraft Systems Training Course. His Certificate of Training from Flight Safety remarks that there was no flight training, and that the aircraft simulator training was not completed.

Additional personnel information may be obtained in this report on Page 3 under the section titled First Pilot Information, and in Supplement E of this report.

AIRCRAFT INFORMATION

The Cessna 208B, N227DM, was a single engine, fixed gear, 10 place, turbo propeller airplane. The aircraft was configured for executive seating, and had a lavatory located in the aft section of the cabin.

The aircraft was purchased new in February of 1994 by D.M.C. Flying Service. The last annual inspection of the aircraft was accomplished on January 12, 1995. At the time of the last annual inspection the aircraft and engine had 201.5 hours in service. The amount of flight time the aircraft operated after the last annual could not be obtained.

Additional aircraft information may be obtained in this report on page 2 under section titled Aircraft Information.

METEOROLOGICAL INFORMATION

The Lee Gilmer Memorial Airport in Gainesville, Georgia was in the process of installing an automated weather observation station (AWOS). The AWOS had not been certified at the time of the accident, and the weather reported by the AWOS is not available by means of radio communication. The AWOS was operating at the time of the accident, and recorded the following weather at 2009. Ceiling 200 feet with overcast skies, visibility of one and one half miles. The temperature was reported as 45 degrees fahrenheit, and the dew point was 45 degrees fahrenheit. Winds were from 090 degrees at five nautical miles per hour, and the altimeter setting was 20.25 inches of mercury.

The ceilings in the area at the time were reported by the witnesses on the ground to be about 100 feet above the terrain, and the visibility to be about 500 feet in fog and rain. (See Statement of Mr. Stephen Simpson Attached to This Report.)

Additional Meteorological information may be obtained on page 4 of this report under section titled Weather Information.

AIDS TO NAVIGATION

The Lee Gilmer Memorial Airport in Gainesville, Georgia is served by a non directional beacon (NDB) instrument approach. The published minimum descent altitude for the NDB approach is 1740 feet above mean sea level and 465 feet above ground level. A pilot flying in the area at the time of the accident, stated that he was waiting for N227DM to complete the approach, in order to begin the NDB approach into Gainesville. He stated that he had the NDB tuned into his radio, and that the signal

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Narrative (Continued)

strength seemed to be normal and he was receiving the GVL identification.(See Record of Conversation with Mr. Johnny Masters Attached to This Report.)

WRECKAGE INFORMATION

The aircraft impacted the terrain in a wooded area about 3/4 of a mile south southeast of the Lee Gilmer Memorial Airport. The terrain elevation in the area of the accident site is about 1200 feet above mean sea level.(See Copy of Topographical Map of Area Attached to This Report).

The wreckage was distributed over an area about 319 feet in length, on a magnetic heading of 240 degrees. There were trees, eight inches in diameter at the base, about eighty feet in height located at the beginning of the wreckage path. The trees were broken off about 50 feet above ground level. The elevator trim tab and elevator counter weight were the first pieces of the aircraft wreckage located in the direction of impact from the broken trees. The elevator trim tab and counterweight were located 90 feet in the direction of impact from the beginning of the wreckage site. The trim tab had a "U" shaped indentation on the outboard leading edge.

An outboard section of the right aileron, about three feet in length was located about 25 feet, in the direction of impact from the elevator trim tab. there was a "U" shaped indentation in the aileron.

The aircraft engine displayed severe impact damage including complete separation of the reduction and accessory gearbox housings, separation of the flange "C" retaining bolts, and moderate to severe compressional deformation of the exhaust duct and gas generator case. Severe circumferential rubbing and machining were displayed by the compressor turbine disc and interstage baffle, and the power turbine disc and baffle. The compressor 1st stage blade tips and shroud displayed strong circumferential rubbing.

There was no indication of pre-impact failure of the aircraft flight controls. The aircraft propeller showed signs of chordwise scratching and twisting toward low pitch.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy of the left seat pilot was conducted by Dr. Steven F. Dunton, the Medical Examiner for the city of Gainesville, Georgia, on March 4, 1995.


A toxicological examination of the left seat pilot was conducted by the Toxicology and Accident Research Laboratory of the Federal Aviation Administration in Oklahoma City, Oklahoma. The toxicology report was negative for the use of drugs and alcohol.


An autopsy of the right seat pilot was conducted by Dr. Steven F. Dunton, the Medical Examiner for the city of Gainesville, Georgia, on March 4, 1995.


A toxicological examination of the right seat pilot was conducted by the Federal Aviation Administration Toxicology and Accident Research Laboratory in Oklahoma City, Oklahoma. The toxicology report was negative for the use of drugs. The report showed 11.000 milliliters per deciliter (0.01%) ethanol in the blood, 6.000 milliliters per deciliter (0.01%) acetaldehyde in the blood, and 1.000 milliliters per deciliter (0.001%) acetaldehyde in the lung fluid. The report noted that the ethanol found in this case is most likely from postmortem ethanol production.

ADDITIONAL INFORMATION

The aircraft wreckage was released to Mr. Harry Brooks, the owners insurance representative, on March 5, 1995.

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Landing Facility/Approach Information					
Airport Name LEE GILMER MEMORIAL	Airport ID: GVL	Airport Elevation 1275 Ft. MSL	Runway Used 4	Runway Length 4999	Runway Width 100
Runway Surface Type: Asphalt					
Runway Surface Condition:					
Type Instrument Approach: ADF/NDB					
VFR Approach/Landing: None					
Aircraft Information					
Aircraft Manufacturer CESSNA	Model/Series 208B		Serial Number 208B-0364		
Airworthiness Certificate(s): Normal					
Landing Gear Type: Tricycle					
Homebuilt Aircraft? No	Number of Seats: 10	Certified Max Gross Wt. 8750 LBS	Number of Engines: 1		
Engine Type: Turbo Prop	Engine Manufacturer: P&W	Model/Series: PT6A-114A	Rated Power: 675 HP		
- Aircraft Inspection Information					
Type of Last Inspection Annual	Date of Last Inspection 01/12/1995	Time Since Last Inspection Hours	Airframe Total Time Hours		
- Emergency Locator Transmitter (ELT) Information					
ELT Installed? Yes	ELT Operated? No	ELT Aided in Locating Accident Site?			
Owner/Operator Information					
Registered Aircraft Owner DMC FLYING SERVICE	Street Address RR3 CANDLER RD.				
	City GAINESVILLE	State GA	Zip Code 30501		
Operator of Aircraft Same as Reg'd Aircraft Owner	Street Address Same as Reg'd Aircraft Owner				
	City	State	Zip Code		
Operator Does Business As:			Operator Designator Code:		
- Type of U.S. Certificate(s) Held: None					
Air Carrier Operating Certificate(s):					
Operating Certificate:		Operator Certificate:			
Regulation Flight Conducted Under: Part 91: General Aviation					
Type of Flight Operation Conducted: Personal					
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First Pilot Information																																																																																				
Name		City		State	Date of Birth	Age																																																																														
On File		On File		On File	On File	46																																																																														
Sex: M	Seat Occupied: Left	Principal Profession: Civilian Pilot			Certificate Number: On File																																																																															
Certificate(s): Airline Transport; Flight Instructor																																																																																				
Airplane Rating(s): Multi-engine Land; Single-engine Land																																																																																				
Rotorcraft/Glider/LTA: Helicopter																																																																																				
Instrument Rating(s): Airplane; Helicopter																																																																																				
Instructor Rating(s): Airplane Multi-engine; Airplane Single-engine; Helicopter; Instrument Airplane																																																																																				
Type Rating/Endorsement for Accident/Incident Aircraft? No				Current Biennial Flight Review?																																																																																
Medical Cert.: Class 1		Medical Cert. Status: Valid Medical--w/ waivers/lim.			Date of Last Medical Exam: 07/28/1994																																																																															
<table border="1"> <tr> <th rowspan="2">- Flight Time Matrix</th> <th rowspan="2">All A/C</th> <th rowspan="2">This Make and Model</th> <th rowspan="2">Airplane Single Engine</th> <th rowspan="2">Airplane Multi-Engine</th> <th rowspan="2">Night</th> <th colspan="2">Instrument</th> <th rowspan="2">Rotorcraft</th> <th rowspan="2">Glider</th> <th rowspan="2">Lighter Than Air</th> </tr> <tr> <th>Actual</th> <th>Simulated</th> </tr> <tr> <td>Total Time</td> <td>2005</td> <td>201</td> <td>1404</td> <td>489</td> <td>104</td> <td>221</td> <td>99</td> <td>110</td> <td></td> <td></td> </tr> <tr> <td>Pilot In Command(PIC)</td> <td>1887</td> <td>201</td> <td>1200</td> <td>450</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Instructor</td> <td>1056</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 90 Days</td> <td>50</td> <td>10</td> <td>33</td> <td>17</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 30 Days</td> <td>5</td> <td>1</td> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 24 Hours</td> <td>2</td> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Multi-Engine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air	Actual	Simulated	Total Time	2005	201	1404	489	104	221	99	110			Pilot In Command(PIC)	1887	201	1200	450							Instructor	1056										Last 90 Days	50	10	33	17							Last 30 Days	5	1	5								Last 24 Hours	2	2								
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Seatbelt Used? Yes		Shoulder Harness Used? Yes		Toxicology Performed? Yes		Second Pilot? Yes																																																																														
Flight Plan/Itinerary																																																																																				
Type of Flight Plan Filed: IFR																																																																																				
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Type of Clearance: IFR																																																																																				
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Weather Information																																																																																				
Source of Briefing: Flight Service Station																																																																																				
Method of Briefing:																																																																																				

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			Occurrence Date: 03/03/1995		
			Occurrence Type: Accident		

Weather Information					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
GVL	2009	EST	1277 Ft. MSL	1 NM	330 Deg. Mag.
Sky/Lowest Cloud Condition: Unknown				0 Ft. AGL	Condition of Light: Night/Dark
Lowest Ceiling: Overcast			200 Ft. AGL	Visibility: 1.5 SM	Altimeter: 30.00 "Hg
Temperature: 7 °C		Dew Point: 7 °C	Wind Direction: 90		Density Altitude: Ft.
Wind Speed: 5		Gusts:	Weather Conditions at Accident Site: Instrument Conditions		
Visibility (RVR): 0 Ft.		Visibility (RVV) 0 SM	Intensity of Precipitation: Unknown		
Restrictions to Visibility: Fog					
Type of Precipitation: None					

Accident Information					
Aircraft Damage:		Aircraft Fire:		Aircraft Explosion	
Classification:					
- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot	1				1
Second Pilot	1				1
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants					
Other Crew					
Passengers					
- TOTAL ABOARD -	2				2
Other Ground	0	0	0		0
- GRAND TOTAL -	2	0	0		2

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	Occurrence Type: Accident	
Administrative Information		
Investigator-In-Charge (IIC) ROFF H. SASSER,		
Additional Persons Participating in This Accident/Incident Investigation: DUDLEY W BOONE FAA ATLANTA, GA		
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